

AMENDED CLAIMS

[received by the International Bureau on July 04, 2005 (07.04.2005);
claims 1 to 16 replaced by new claims 1 to 24 (5 pages)]

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CLAIMS

1. An anti-glare device comprising a camera (1), a
visualization means for reproducing a processed
image and an adaptable filter (2) presenting a
10 filtering image, said image presenting masking
regions obscuring the glare regions, characterized
in that it comprises a single camera (1), the
output of which is connected to an electronic
circuit (5) controlling the filter (2) and re-
15 evaluating, in time, the filtering image according
to an image acquired by said camera, said filter
being placed in the focal plane of an input lens.
2. The anti-glare device as claimed in claim 1,
20 characterized in that the electronic circuit (5)
controls the filter for the alternate display of
an acquisition image and a filtration image
calculated according to the image transmitted by
the camera (1) during the previous acquisition
25 phase.
3. The anti-glare device as claimed in claim 2,

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characterized in that the circuit (5) disables the transmission of the video signal from the camera (1) to the visualization means during the acquisition phases.

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4. The anti-glare device as claimed in claim 2 or 3, characterized in that the electronic circuit (5) transmits to the visualization means, during the acquisition phases, a prerecorded image corresponding to the image transmitted by the camera before the acquisition phase.

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5. The anti-glare device as claimed in any one of claims 2 to 4, characterized in that the electronic circuit (5) controls the filter (2) during the acquisition phase, so that it presents a uniform transmission rate over the entire surface area, with a transmission value corresponding to a value V_t less than 1.

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6. The anti-glare device as claimed in claim 5, characterized in that said value V_t is determined according to the brightness of at least one previous image.

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7. The anti-glare device as claimed in claim 1, characterized in that the electronic circuit (5) permanently controls the filter for the display of

a filtering image, the control law being dependent:

on an image filtered by a filtering image calculated previously and seen by the camera (1),

5 and

on the filtering image calculated previously.

8. The anti-glare device as claimed in the preceding claim, characterized in that said control law of
10 the filter comprises at least one hysteresis cycle with two threshold levels.

9. The anti-glare device as claimed in any one of the preceding claims, characterized in that the filter
15 (2) is a liquid crystal filter.

10. The anti-glare device as claimed in the preceding claim, characterized in that said filter is a reflection filter (12).

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11. The anti-glare device as claimed in the preceding claim, characterized in that said filter is a transmission filter.

25 12. The anti-glare device as claimed in any one of claims 1 to 10, characterized in that the filter is a steerable micromirror filter.

13. The anti-glare device as claimed in any one of the preceding claims, characterized in that the masking regions present a maximum transmission in a waveband.
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14. The anti-glare device as claimed in the preceding claim, characterized in that said waveband corresponds to the red.
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15. A method of processing an image acquired by a camera, comprising a filtration step by a filter controlled by a masking image re-evaluated in time, a step during which the image is acquired by the camera after insertion of said filter
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- controlled by the previously re-evaluated masking image, said filter being placed in the focal plane of an input lens and said re-evaluation being dependent on an image previously acquired by the camera.
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16. The method as claimed in the preceding claim, characterized in that it comprises, alternately, a step for acquiring an image and analyzing said image to prepare a masking image, and said
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- filtration step, the steps for acquiring images to control the filter and for reproducing the corrected image being performed by the same camera.

17. The method as claimed in the preceding claim,
characterized in that the images reproduced during
the step for acquiring the masking image
5 correspond to a previous corrected image.
18. The method as claimed in claim 16, characterized
in that the step for acquiring a filtration image
is performed in a time less than the retinal
10 persistence time.
19. The method as claimed in claim 15, characterized
in that said re-evaluation comprises a step for
calculating the new masking image according to a
15 previously evaluated masking image and an image
previously acquired by the camera and filtered by
said previously evaluated masking image.
20. The method as claimed in the preceding claim,
20 characterized in that said evaluation comprises a
step consisting, for each pixel or group of pixels
of said masking image:
in modifying the transmission rate to a more
passing state if the luminance of the
25 corresponding pixel or group of pixels of the
filtered image previously acquired is less than a
threshold S2,
in modifying the transmission rate to a less

passing state if the luminance of the corresponding pixel or group of pixels of the filtered image previously acquired is greater than a threshold S1 greater than the threshold S2,

5 in retaining the transmission rate of said previously evaluated masking image if the luminance of the corresponding pixel or group of pixels of the filtered image previously acquired is between said thresholds S1 and S2.

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21. An accessory of a photographic or video exposure device, for correcting the image acquired by an image sensor, characterized in that it comprises an active filter controlled by a masking image re-evaluated in time by a circuit receiving the image acquired by the camera.

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22. The accessory as claimed in the preceding claim, characterized in that said circuit receiving the image acquired by the camera periodically controls the presentation by the filter of a reference masking image during the phases for acquiring a new masking image.

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25 23. The accessory as claimed in the preceding claim, characterized in that said circuit also disables the link between the image sensor and the output of the exposure device during the phases for

acquiring the filtration image.

24. The accessory as claimed in claim 21,
characterized in that said circuit receiving the
5 image acquired by the camera re-evaluates the
masking image according to the masking image
previously used and the image recently acquired by
the camera through the masking image previously
used.